

## REMARKS

The Official Action of 6 September 2006 has been carefully considered and reconsideration of the application as amended is respectfully requested.

Claims 1 and 9 have been amended to recite that the rubber phase of the claimed fully vulcanized thermoplastic elastomer is provided by a fully vulcanized powdery rubber prepared by vulcanizing a corresponding rubber latex with irradiation. This amendment draws support from the specification as filed at, for example, page 5, lines 5-7 and page 6, lines 18-19. The claims have also been amended to restore independent claim 1 to the broader particle size limits described in the specification at, for example, page 3, lines 9-11, and so as not to limit the independent claims to specific rubbers. Dependent claims reciting the narrower size limits and the specific rubbers have been reinserted into the application (see new claims 25-29).

Certain claims continue to be rejected under 35 USC 103(a) as allegedly being unpatentable over Coran et al. Applicants respectfully traverse these rejections.

All claims presently of record require that the shape of the rubber phase of the claimed elastomer is spheroidic and/or that the rubber phase is provided by a fully vulcanized powdery rubber prepared by vulcanizing a corresponding rubber latex with irradiation. Those of skill in the art will understand that because of the homogeneous, regular, sphere-like shape of rubber particles in the latex, fully vulcanized powdery rubber thus prepared and a rubber phase of the thermoplastic elastomer will have homogeneous, regular, sphere-like shape, which cannot be

achieved by a dynamic vulcanization process or a process of granulating a prevulcanized rubber, such as described by Coren et al. Furthermore, as described in the specification of the present application, due to the good particle morphology of the rubber phase of the claimed fully vulcanized thermoplastic elastomer, the claimed fully vulcanized thermoplastic elastomer has many virtues, for example, improved tensile strength and elongation at break, good appearance, good rheological and processing performance, and the like.

In contrast, as described in the specification of the present application in the paragraph bridging pages 2-3, the rubber phase of a vulcanized thermoplastic elastomer prepared by a dynamic vulcanization method (such as in the cited reference) is **irregular**, which is adverse to a rheological property of the vulcanized thermoplastic elastomer. Moreover, and significantly for the purposes of the claimed invention, an irregular shape is not spheroidic and cannot otherwise be considered to meet the product-by-process limitations which require the claimed product to have a regular shape as discussed above.

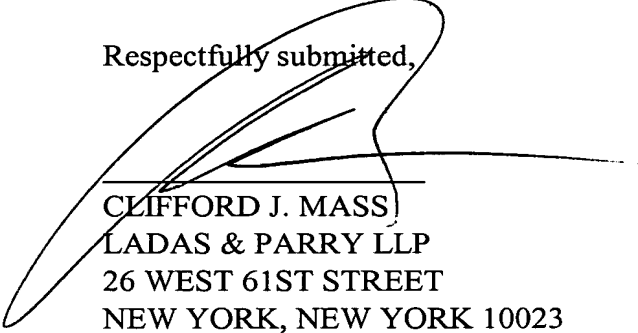
The Examiner has contended that any particle that is characterized by particle size is inherently spheroidic **to some degree**, but Applicants respectfully submit that this is an erroneous interpretation that would rob the term of its meaning. A particle is either spheroidic or not, it cannot be part spheroidic and part irregular. Accordingly, the Examiner is respectfully requested to withdraw the rejection. If the Examiner persists in this rejection, he is respectfully requested to produce documentary support of his interpretation of the definition of “spheroidic” in accordance with the provisions of MPEP 2144.03(C). He is also respectfully requested to

explain how the Coran dynamic vulcanization process could produce particles that meet the product-by-process shape limitations of the claims as amended.

In view of the above, Applicants respectfully submit that the cited reference cannot be considered to set forth even a *prima facie* case of obviousness for the invention as defined by the claims as amended such that the sole remaining rejection should be withdrawn.

Accordingly, the application is respectfully believed to be in allowable form. An early notice of allowance is earnestly solicited and is believed to be fully warranted.

Respectfully submitted,



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